Mike,

Would you be willing to push this to operations committee to review.? I think this is a good case of what the ISICS system would have done to prevent some of this. With the concept of using the regional talkgroups in that area and patching, I would be interested to see what everyone thinks on using ISICS in this scenario with both level 1 users and operational users would result.

This is clearly an operations committee dive. There could possibly be a policy that can be developed off your research.

Let me know.

From: Maiers, Christopher [DPS]

Sent: Wednesday, January 10, 2018 9:17 AM

To: Downes, James < James. Downes@HQ.DHS.GOV>

Cc: 'Lundsted, James' < <u>James.Lundsted@HQ.DHS.GOV</u>>; Kasper, Mike [Outside]

<<u>Mike.Kasper@linncounty.org</u>>; Lampe, Tom [DPS] <<u>lampe@dps.state.ia.us</u>>; 'Jason Leonard'

<jasonl@ci.waverly.ia.us>

Subject: FW: Interoperability issue

Jim,

I hope all is well today. An interoperability problem was brought to my attention yesterday that seems to revolve around a technology issue. Lt. Mike Kasper from the Linn County (Iowa) Sheriff's Office summarized it for me in his email below.

For some background, Linn County utilizes a Harris 800 P25 Phase 1 system, and everything is encrypted. Its neighboring counties in this pursuit utilize various flavors of VHF that are non-encrypted if memory serves. All times listed are in Central Standard time. The pursuit was primarily along US-151 which is a four-lane highway from Cedar Rapids to Dubuque. I've attached a map of the area to this email for reference.

Here is an acronym list for reference as well:

- LCSO Linn County Sheriff's Office
- LCSO1 Linn County Sheriff's Office 1; talk group for operational communications.
- IDOT Iowa Department of Transportation

Do you think that something like the situation below with patching should be brought up at one of the FPIC, P25 Steering Committee or TIA/TR-8 meetings?

Thanks,





Chris Maiers

Statewide Interoperability Coordinator Interoperability Communications Bureau Iowa Department of Public Safety

p: 515-725-6108 f: 515-725-6193 m: 515-201-7478 a: 215 E. 7th St., Ste. 450. Des Moines. IA

From: Kasper, Mike [mailto:Mike.Kasper@linncounty.org]

Sent: Tuesday, January 9, 2018 4:48 PM

To: Maiers, Christopher [DPS] < <u>maiers@dps.state.ia.us</u>>

Subject: Interoperability issue

Chris,

On December 14th around 0930, LCSO broadcasted an attempt to locate for a reckless driver near Springville on Hwy 151 in Linn County. The vehicle was located and a traffic stop attempted for speeding. The vehicle sped through Marion with Marion PD and LCSO units pursuing. Radio operations were on LCSO1, one of main ops talk groups. Marion did not join the pursuit on our talk group. They used their own talk group which caused dispatch center to relay information to responding/involved units. Pursuing units briefly lost sight of the suspect vehicle and terminate the pursuit. It was located several minutes later and pursued again by a marked LCSO Patrol unit eastbound on Hwy 151 toward Springville. Speeds were over 100. IDOT officer joined the pursuit along with units from Monticello, Jones County, and later Dubuque County. The pursuit continued east bound all the way through Jones County and terminated near Cascade in Dubuque County when the driver simply pulled over.

Linn County uses a Harris 800 Phase 1 P25 system. All law talk groups are encrypted full-time. There are "hard-patched" interop gateways from our system to VLAW31 and Cedar Rapids LEA.

Several challenges/opportunities for interoperability were encountered.

- 1. The pursuit notice was never broadcast on Cedar Rapids LEA so the IDOT officer had no idea about it until they passed him at over 100 MPH
- 2. Once Jones County was notified on Point-to-Point, it was decided to patch our LCSO1 with VLAW31. Normal system operation says that when patching unencrypted talk group with encrypted talk groups, that the resultant talk group with a new "system ID" will default to unencrypted. This did not fully happen. Our dispatch consoles transmitted unencrypted on all the patched talk groups, but any mobile that remained on encrypted LCSO1, transmitted encrypted across the patch, thus VLAW31 users could not hear it. About 2/3 of the way through the chase, one mobile user switched to VLAW31 and was able to be heard across the patch to our system users and other responding units via direct VHF communication from our tower location that houses the VLAW31 gateway.
- 3. Our mobile radios have a quick key that takes them directly to VLAW31 on the VHF bank of the quad band Harris radio. They did not use it

- which hampered communication as the chase moved further east away from our VLAW31 gateway TX site.
- 4. We did however maintain 800 P25 coverage nearly all the way through Jones County. Coverage stopped just west of Cascade near where the pursuit ended.
- 5. Jones County has a control station for our P25 system. They, along with pursuing officer using VHF radios were able to get updates, just not as timely as we wanted.

The patch behavior can be reproduced. The manufacturer is looking into why it happened as our local radio shop/vendor that services our system understood that when patching unencrypted talk group with encrypted talk groups, that the resultant talk group with a new "system ID" will default to unencrypted.

Lt. Mike Kasper

Communications Commander

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